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# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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DOG M  
MINERALS PROGRAM  
FILE COPY

November 16, 1990

TO: File

FROM: Tony Gallegos, Reclamation Engineer *ddg*

RE: Site Inspection, Tenneco Minerals, Tenneco Goldstrike Project, M/053/005, Washington County, Utah

On November 14, 1990 representatives from the BLM, Bureau of Water Pollution Control, and the Division inspected the Goldstrike site. Representing the BLM were: Dave Everett, Gordon Staker, Paul Carter, Ron Montagna and Kim Leany. Representing the Bureau of Water Pollution Control were: Lyle Stott, Mack Croft, and John Kennington. Representing the Division were: Wayne Hedberg, Holland Shepherd and Tony Gallegos. The purpose of the inspection was to review and comment on the amended mine plan proposal submitted by Tenneco.

A meeting was held with Ken Kluksdahl of Tenneco, at the mine office to discuss the proposal before inspecting the mine site. Issues of major focus were: design details of the Quail Canyon Containment Dam and leach pad fill, post-reclamation drainage from Quail Canyon, and final reclamation and decommission of Heap Leach No. 2.

The site inspection began with a stop at the West Hassayampa Extension where removal of topsoil material was nearly complete. After mining, this area will be backfilled as part of Dump No. 1.

The next stop was near the Peace Mine area which is located adjacent to the current Quail Creek drainage. After mining, this area will be under part of the foundation for Leach Pad No. 2. The location for the Quail Creek Containment Dam was also visible from this area. The existing roads were causing material to encroach into the Quail Creek drainage. It was pointed out that sediment fences were presently in place in the lower sections of this drainage. However, disturbed and undisturbed area runoff coming in this drainage which is not treated by the operation's sediment pond. The type of sediment control in this drainage should be improved, especially when construction of the dam and pad begin. The proposal calls for placement of some 2.2 million tons of material to be placed in



the steep walled canyon to bring the bottom up to grade with the existing leach pad foundation.

A stop was made at the recently installed liner at Heap Leach Pad No. 2. The 80 mil liner was in place and awaiting inspection before placement of the ore blanket. Portions of the solution ditch had been covered with half round corrugated plastic pipe to prevent animal mortalities. Some of the ditches have not been covered completely, while around other areas which are covered, the solution has ponded. This is a result of fine sediment from the heaps building up against the plastic. Maintenance should be performed along the solution ditches periodically to alleviate the ponding and to ensure there are no gaps in the ditch covers.

The next stop was at the approved Padre Pit area where topsoil was being salvaged and hauled to a stockpile. The proposed Padre Pit expansion and dump areas were visible from this vantage point. The Padre Pit is one of two pits where no backfilling is proposed.

The next stop was to inspect the recent breach area at Leach Pad No. 1. Ken explained the circumstances of the event and the possible cause. This leach pad had been shut down after the breach was discovered and was currently producing approximately 40 GPM of draindown leachate solution. Steps to discover the actual cause and remedy the problem will be taken once the affected area is considered stable.

The next stop was at the recently reclaimed slope at the West Hamburg Pit area. A steeply inclined slope had been reclaimed in August 1990 using netting to stabilize the topsoil. Reclamation was attempted by: 1) end dumping topsoil from the top of the approximate 700 foot angle of repose slope, 2) hand raking the topsoil smooth, 3) hand seeding the area with the seed mix described in the Division's June 5, 1990 letter to Tenneco, 4) hydromulching and tactifying the area and 5) laying out and securing netting to help stabilize the slope. A variance to allow these steep slopes to remain at their current angle of repose is included in the proposed plan amendment.

The next stop was overlooking the Plant Facilities and the Basin Pit area. The Basin Pit is the other pit which will not be backfilled as part of final reclamation. The proposal calls for the expansion of the current fresh water pond (SW pond) and the construction of a new pond south of the facilities area.



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The last stops were at two of the three pit areas for the Goldtown pit. This pit is actually three individual zones of ore material.

A followup meeting was held at the mine office to wrap up the inspection and discuss any further concerns with the proposed amendment. The main topics of discussion were the decommissioning and final reclamation of Heap Leach No. 2. The proposal calls for neutralizing the heap by rinsing with or without a cyanicide, allowing the heap to drain, grading the sideslopes to 2:1 (h:v), covering with topsoil and revegetating. Key points of this meeting were: 1) the possible future rebound of cyanide concentrations at after the heap had met the required neutralization criteria; 2) leaving sideslopes at a 2:1 angle will not be conducive to revegetation and will therefore leave the heap in an instable condition; and 3) regrading the sideslopes to a lesser angle and allowing "neutralized" leached materials to move off the liner may not be acceptable. No conclusions were reached at this meeting.

jb  
cc: Ken Kluksdahl, Tenneco  
Dave Everett, BLM  
Lyle Stott, BWPC  
MNM053005.1



tenneco's POO  
ATTENDANCE

FILE M/053/005

11-11-90

1. David F. Everett Dixie R.A.
2. Mack Croft BWPC
3. Lyle W. Stoff "
4. JOHN KENNINGTON "
5. D. WAYNE HEDBERG DOGM 538-5340
6. Holland Shepherd DOGM 538-5340
7. TONY GALLEGOS DOGM " "
8. Gordon R. Stakw BLM Cedar City
9. PAUL CARTER BLM "
10. Ron Montagna BLM " 586-2401
- ~~Dave Everett~~ " Dixie Res. Area
11. Kim Leany BLM " "